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DEPARTMENT OF GEOGRAPHY

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**A STUDY OF THE CHARACTER AND DISTRIBUTION
OF POPULATION PRESSURES IN SOUTHERN ITALY**

ONR Project 577 (00)

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A STUDY OF THE CHARACTER AND DISTRIBUTION OF POPULATION PRESSURES IN SOUTHERN ITALY

The project as submitted in Spring, 1951

Objectives

The study will have three interrelated objectives:

1. to determine quantitatively for southern Italy, and to map by communes, significant ratios between (a) the numbers and minimum material requirements of population; and (b) the production of goods and services, as measurements of "population pressures."
2. to interpret the geographic variations of these ratios in terms of the existing relations of man to the land in the different regional environments of southern Italy.
3. to seek conclusions as to how, and in what degree, conditions of poverty, malnutrition, and underemployment, may be alleviated in the different regional environments, by changes in existing modes of livelihood and organization.

Justification

Southern Continental Italy is a conspicuous example of a predominantly self-subsistent agricultural area, with restricted possibilities of industrial development, that is beset with the problem of an excess of population under current social and economic conditions. Such problems are crying for investigation in many parts of the world. The area of study is limited to the Compartments of Abruzzi, Campania, Apulia, Basilicata, and Calabria.

The term "population pressure," that is often vaguely used, is taken to mean specifically the ratio between the people and production. In an area such as

southern Italy, with extremely primitive conditions of subsistence agriculture, it is, in effect, a direct man-land ratio. Here, the present social and economic conditions, the high birth rate, and the lack of opportunities of migration, are such that there is a widespread occurrence of poverty, malnutrition and underemployment. These conditions vary with the ownership and cultivation of the land and with the total of other job opportunities. Consequently, they must vary in their incidence in different regional environments. Especially relevant to the man-land ratio are conditions of land ownership, land use, demography, employment, and income offered by ones holding, and the opportunities of employment (casual, seasonal or permanent) elsewhere, at home or abroad.

Standards of measure of these various conditions are needed so as to determine their incidence and geographic distribution. We need measures of underemployment, of malnutrition, and of poverty.

Such investigation calls not only for specific standard of measurement, however. It also calls for a proper appraisal of such conditions in the totality of man-land relationships in different environments. No single condition can be understood except in the context of the whole socio-economic pattern of living. We need to know, for example, the exact relation between the size of holding and the mode of farming to the production of food for the consumption of the cultivator and his family. We need to know the relation between "income" and "expenditure." We need to know more specifically the relation between the "input" and the "output" of the land. We need to know, further, the ways in which the land use may be improved and the carrying capacity be increased. Answers to these questions are to be found not merely in the examination of single traits, but from the way in which these traits are combined and interdependent under different patterns of living in different environments.

This approach will help to discover possibilities of improvement of such conditions through the redistribution of land, increased size of holdings, improved techniques, and new job opportunities.

Procedure

We shall carry out this study in southern Italy in such a way as to determine quantitatively the regional variations of these basic living conditions. Attention will be concentrated on the following aspects:

1. the distribution, grouping and size of settlements
2. the major categories of land use and the patterns of land holdings.
3. the character of the rural economy in terms of the size of holdings, crop rotations, livestock, cultivation techniques, continuity of work, adequacy of food returns for family subsistence.
4. the functional structure of the rural settlement in terms of occupation and services.

After further study in Rome and Naples and reconnaissance, we shall select a number of villages in the area for special study. This will involve some four weeks or more in each of perhaps six distinct areas, such as Lucania, Calabria, and Apulia. The actual procedure will raise two distinct problems of method, which demand experimentation in studies of this kind.

First, there is the problem of working out categories of land use and ownership and relating these categories to the patterns of settlement. The latter refers to the location and extent of the lands associated with each rural-work-area, be it a latifundia, a village, or hamlet. (The commune is the normal work and community area, but there are many deviations from this simple pattern that are of basic significance in the man-land relations). The relation between land and rural-work-area is a basic concept of this whole approach.

Second, a standard questionnaire is being devised to be used in the village studies. Families will be selected by a sampling technique and personally interviewed. The questionnaire will give specific, consistent, and reliable information on such matters as: size of holding, rotation of crops, yields of crops, sources of income, items of expenditure, degree of self-sufficiency in food, periodicity and seasonal rhythm of labor. This mode of enquiry, while developed by other social science workers, has been neglected by geographers in the field and requires serious attention in studies of this kind. It is hoped that from such data we shall be able to prepare, for example, "sociographs" of the seasonal rhythm of work, and maps indicating the local patterns of migration; the extent of rural-work-areas; and the occurrence of periods of unemployment.

Report on Project 1951-53

Summary

Work was carried out in the field in southern Italy during 1951-52 and the materials assembled at Syracuse University during 1952-53.

The investigation has been based upon (1) field work in the area, (2) a large body of publications, mainly in the field of agricultural economics, (3) official statistics, principally the Censuses of Population and Agriculture, (4) materials, (standard topographic series on the scales of 1:25,000, 1:50,000 and 1:100,000, and geological maps on the scales of 1:80,000, 1:250,000 and 1:1,000,000 and other map and atlas data; and (5) on the current reports of progress of the program of regional reconstruction that is being carried out by the government body known as the Cassa per il Mezzogiorno (formed in 1950).

The research has focussed on the selection of meaningful criteria for the assessment of the character and degree of overpopulation in the South, and the presentation of such data on a series of maps on a scale of 1:1,000,000.

The study has met with certain peculiar difficulties.

First, the program of reconstruction is in its third year. Projects are being carried out, researches are under way. Our results must therefore be provisional. They indicate conditions before the onset of this vast reconstruction program.

Second, Census data are for 1936 for population and 1929 for agriculture. Publication of the ¹⁹⁵⁰ census has been delayed but will appear during the coming year. Data and conclusions will have to be revised in the light of these newer data - of the 1951 census and of the changes brought about by the present reconstruction program.

Third, it has been a slow process to get hold of essential statistical data from Italy by correspondence. Some were not available in the States. Micro-film material did not arrive until August and must now be worked through in order to complete the calculations and maps.

Fourth, the reconstruction program is probably the most intensive program that is going on in any "underdeveloped" area. This research will have to be checked as the program goes on and it in turn will serve to evaluate the progress of the program that is being carried out in the South, in large measure, be it noted, through the aid of American dollar funds.

It will certainly be necessary to revisit the area during the next years (1954-60) in order to assess the progress of this reconstruction program and the ways in which it seeks to solve the problem of underemployment and poverty in the south.

The following report deals briefly with the work done in Italy in 1952-52 and the work done in Syracuse in 1952-53. The bulk of the report is a summary of the findings. This summary falls into two parts:

1. A list of the maps prepared in the investigation with comments upon them, pp. 8-18.
2. A summary of the main conclusions drawn from this investigation, pp. 19-26.

Report on Project 1951-53

Program 1951-52

Field Work in Italy

The first year, 1951-52 was spent in the field as indicated in the initial proposal. Contacts were made at once with the appropriate authorities in Rome and Naples. Headquarters were in Naples until the end of December, 1952. Subsequently we worked in the field with centres at Bari and Cosenza. Our principle contacts throughout were with the officials of the newly established offices for agrarian reform for Apulia-Lucania and for the Sila areas respectively. We spent time in Naples, Bari, and Cosenza collecting basic information. We also studied specific small areas in the field as illustrating conditions prevailing in the wider regions. The regions were determined from published works as well as from observations on extensive field traverses throughout the south. We also spent six weeks in a visit to Greece, Lebanon, and Cyprus in order to examine the work that was going on there in the field of agricultural and rural betterment. In Greece in particular contact was made with the American Mission and the New East Foundation and visits were made to remote villages in these countries where these organisations had work in hand. Contacts were made with government officials in Cyprus. This experience offered new lights on the general problem of the relief of poverty and the methods that were being adopted in southern Italy in particular.

In southern Italy the agricultural economists through the Istituto Nazionale Di Economia Agraria (National Institute of Agricultural Economics) have undertaken a great amount of work on the problem of overpopulation in its agricultural aspects. The work of agrarian and land reform within the general program of the ten year program of the Cassa per il Mezzogiorno - an ad hoc State organization formed in 1950 to coordinate a vast ten year program for the betterment of the south - is based upon such fundamental research by the agricultural economists as outlined in our project.

Moreover, this Institute has sponsored for many years monographs on varied aspects of agricultural economics in different regions. These fit closely with the objectives we set for our research and such materials (most of them unavailable in the United States) had to be collected and evaluated. Studies were made in the field, wherever possible, with the expert guidance of those most closely concerned.

Program 1952-53

Syracuse University

With the aid of two assistants, materials were collected, evaluated, and the data mapped.

The program has followed two general lines:

First, the study of several small type areas in detail. These are in the Sila area of northern Calabria, two areas in Potenza, and the Tavoliere in northern Apulia, and the Agro Nocerino near Naples. For these areas we have prepared maps on a scale of 1:50,000 indicating the physical base (slopes and general soil types), size of properties, land uses, and the detailed distribution of habitations. For these same areas, we have data of the "level of living" as shown by representative family budgets. Some of this work was already available in Italy; the rest had to be prepared independently.

Second, the work covered is summed up in a series of maps prepared on a scale of 1:1,000,000 for the whole of southern continental Italy. (We excluded at the outset both Sicily and Sardinia from the specific investigations since that would have made the area much too large for effective coverage). The base map was prepared from the so-called Zone Agrarie (Agrarian Zones) devised by the Agricultural Census. Each of these contains up to ten communes so grouped as to form an area with basically the same conditions of rural economy. These materials are contained in the Catasto Agrario (Agricultural Census) published for each Province, dated 1929, and published in fascicules during the thirties.

The data upon which the maps are based are derived from various sources. Of these the two most important are the Population Census of 1936, volume on Agriculture; and the Agricultural Census of 1929. The latter gives minute data of land use and production for every commune and for every Agrarian Zone. The publications of the Istituto Nazionale di Economia Agraria were also used in preparing some of these maps. Published maps and field observations were used in preparing maps of the physical base and surface cover.

The Map Series

The problem here was to devise criteria and categories whereby data relevant to the problem of "population pressure" or "overpopulation" could be effectively mapped so as to determine the essential character of these conditions and their detailed distribution by the Agrarian Zones. This amounts to determining and mapping the following:

1. the relevant natural land conditions that affect agricultural productivity. These are climate, slope, soil, drainage, and incidence of soil erosion, summed up as natural terrain (land) types.
2. the relevant facts of the density of population and of workers expressed as man - land ratios.
3. the relevant facts of the degree of "pressure" of population upon production under the existing conditions of cultivation and land ownership.

"Overpopulation" is not simply a question of "number of persons." It is a question of the degree to which the labor of those actively dependent on agriculture is utilised - from day to day and from season to season. It is also a question of the production of agricultural goods per head of the agricultural population in terms of (a) goods directly consumed and (b) goods sold as a means of procuring the essentials of life (food, clothing, shelter, services). This is expressed as the income per head. Much of our attention, therefore, has been given to the question of determining the "level of living" and the degree of hidden unemployment among the agricultural population; and, having determined suitable measures of these, to map on the basis

of the Agrarian Zones, the regional incidence of such conditions.

The maps series includes the following more important maps, which took up a great deal of time during the Session in calculation and mapping.

Physical Conditions

In addition to the compilation of existing data, our main contribution here was in the preparation of a Map of Slopes. Categories of slope were chosen that were relevant to the crops grown and the peculiar conditions of the South. These categories were as follows - below 5%, 5 - 15%, 15 - 25%, 25 - 45%, and over 45% described as flat, rolling, hilly, steep, and mountainous. The slopes were mapped for every sheet of southern Italy on the scale of 1:100,000. The data were transferred to a map on a scale of 1:250,000. This was finally reduced to a scale of 1:1,000,000 to correspond with the rest of the map series.

A lithological map is keyed to show the following. It is based on geological maps in scales of 1:250,000 that indicate (1) predominant type of rock and (2) degree of permeability.

- Alluvium
- Sands, gravels and conglomerates
- Granites
- Crystalline schists
- Limestones
- Calcareous tufas and travertines
- Limestones
- Clays (argille scagliose)
- Clay marls with residual higher sand platforms
- Soft sandstones (molasse)
- Volcanic.

Comparison of the Slope Map with the distribution of Rock Types and of Vegetation has permitted a classification and mapping of natural land types. Comparison of the Slope Map with the distribution of Lithological Types and Vegetation has permitted classification and mapping of natural land types. This map of terrain conditions is basic to the whole problem of (1) the character and possibilities of agricultural production, and (2) the methods of water and soil conservation that should be adopted. In regard to the latter, slope, soil and drainage determine the type of terracing or drainage system that should be used.

Land Uses

From study of the Catasto Agrario the following main categories were recognised, based on the percentage of each category of land use of the total area of each Agrarian Zone.

1. 40 to 75% in woods, pasture and unproductive
2. 40 to 50% in woods, pastures and unproductive, with 20 to 40% in pasture and unproductive and under 10% in woods
3. Over 65% in sown land (seminativo) with pasture and woods each under 10% and unproductive up to 30%
4. Over 65% in sown land, pasture 20 to 30%, woods and unproductive under 10% each
5. Over 55% in sown land, with 10 to 20% in vines and fruits
6. Over 70% in vines and fruits plus horticulture
7. 50 to 70% in vines and fruits, the rest in sown crops
8. 20 to 50% in vines and fruits, the rest in sown crops
9. 10 to 20% vines and fruits in Campania, North Potenza and Aquila
10. 10 to 20% vines and fruits, 30-40% sown crops, 30-40% woods pasture and unproductive
11. 20 to 50% vines and fruits, vegetables, with woods and unproductive to to 50%
12. Hill Zone of Campania with 50 to 60% in sown crops, 10 to 20% vines and fruits, and 15 to 25% in woods.

Areas of citrous, hemp, and tobacco production are also shown by symbol.

This map serves to distinguish the various combinations of the two major classes of productive land use - vines, olives, and other fruits on the one hand, and "sown crops," of which by far the most important is wheat, on the other hand.

Maps have also been prepared to determine the exact distribution of elements in the rotation of crops - notably, for example, the areas in which constant cropping is practised (the chief area being the lowland of Campania around Naples), and areas in which a large proportion (up to 30%) of the farmed land is left idle each year, either as fallow or as ploughed land treated so as to conserve the scanty moisture

over one whole year (the practice known in the States as "dry farming"). These are indicative of intensity of production.

Economic Agrarian Zones

This map serves as a broad base for the assessment of regional socio-economic conditions. It uses the three divisions of each Province (called Mountain, Hill, and Plain) that are officially used in the Census. It is based primarily on consideration of type of agricultural worker (operator or laborer), size of property and holding, and mode of tenure. Five categories are recognized in the South:

1. The areas of great properties or latifundia with predominantly large tenant holdings employing exclusively hired labor and practising an extensive system of cultivation (wheat and pasture). This type occurs in well-defined and limited areas - Tavoliere, Metaponto, Lower Volturno.
2. The areas of large and medium properties (latifundia) with sub-tenancies and share cropping of various kinds to peasants, the great majority of whom have minute holdings with insecure tenures and practice a simple agriculture with low output per unit area similar in essentials to number 1 above. This covers a belt that includes the eastern border of the Apennines (west of the Province of Foggia), Province of Matera, and a belt right down the east coast-land of Calabria.
3. Areas of mixed peasant farming, i.e. small family holdings, mainly of peasant proprietors and tenants with relatively few laborers and a great variety of complicated tenures. Slightly more varied crop production is found here, with some vines and olives and fruits. It covers most of the interior of the Apennines Abruzzi, Campania, all Potenza, and Calabria.
4. Areas of small and medium holdings practising an intensive agriculture, that depends primarily on the production of vines, olives and fruits and (in certain areas - around Naples and the coast of Bari vegetables). Small holdings predominate, with complex tenures.
5. The area of the Mezzadria system of land operation that predominates throughout Central Italy (and thereby definitely distinguishes it from the South) is found only in the Northeast coastal strip of Abruzzi. Large owners operate their properties through the medium of tenants who share products on a 50-50 basis in return for the land, buildings, livestock and equipment.

The Distribution of Settlement

It is generally assumed that the population in Southern Italy lives almost exclusively in compact villages. It is true that the majority of the population is normally concentrated in such settlements. But there are large areas in which farmsteads are dispersed over the countryside. Some of this dispersion dates from

medieval times. Much of it has taken place during the last hundred years. The present program of agrarian reform aims at breaking down such large concentrations and putting the peasant nearer to his land either in a small cluster of farmsteads or in a farm right on his land. It thus becomes important to know the exact distribution of habitations in relation to holdings. These are varied. There are large compact villages, there are large groups of farm buildings in the midst of large single estates (masserias), there are isolated farmsteads in which the peasant family lives permanently, there are buildings that they occupy temporarily in the work season for a few days or others that they may occupy for a few months. We have attempted from the detailed topographic maps of all the South (1:25,000 and 1:50,000) to map the data on the base of the 1:100,000 sheets. These are to be reduced to 1:1,000,000 to determine the most detailed distribution of habitations in these various categories.

The final generalised map is not yet completed.

The Distribution of Population

Detailed base maps are available from Italian sources of the overall density of total population to total area on the basis of communes. Other calculations of density may be mapped, however, that are much more meaningful to the understanding of man's relation to the land. For example, we have mapped, the density of agricultural population to the total cultivated area (i.e. farmed land excluding pasture, forest, and unproductive land). Population changes are also mapped for the period 1871-1901 and 1901-31. It is not yet possible to map these data for the later period, since the 1951 Census is not yet published.

Agricultural Workers per Unit of Cultivated Land

The effective density of population as a man-land ratio is given by the number of actual workers per unit area of cultivated land. Thus, number of all agricultural workers per 100 hectares of cultivated land are mapped, as well as the

two main categories of such workers, namely, Operators (Conduttori) - i.e. those who are concerned with the cultivation of a particular area of land on their own or somebody else's account (owners, tenants, share tenants, etc.) and Laborers (Lavoratori), i.e. those who work exclusively for somebody else. Marked differences in importance and regional distribution were revealed.

Size and Value of Properties

The distribution of properties (i.e. land ownership) was mapped in various categories. In the final map series we selected the following: percent of each Agrarian Zone in properties over 50 hectares; properties under 10 hectares; and properties under 2 hectares.

Size and Value of Operating Units

Property and Operating Unit are not the same thing and the distinction is very important in Southern Italy. A single property may be subdivided among a number of "operators" - as tenants and share croppers and share tenants. Operating Units with a taxable value under 10,000 lire were mapped as a percentage of the area under operating units of all sizes in each Agrarian Zone. This figure is used since it is considered by Italian experts that a holding of this value permits only a low level of living.

Value of Agricultural Production per Capita

Man-land values based on areas alone give no indication of the value of production per unit of area or the value of production per work unit. Much of our time was devoted to determining significant ratios and mapping them. These are as follows.

Taxable Value per Hectare (1939 prices).

These data are the basis of the taxation of agricultural land in Italy. They are based on a detailed assessment of the productive value of every single minute unit area of land. Our figures were calculated so as to give the average taxable value of each hectare in each Agrarian Zone. This shows the regional pattern of the comparative productive value of land by zones. But it does not go far enough. We

need to know the actual value of agricultural production per unit of area and per worker and per family.

Value of Agricultural Production per Holding (i.e. per family)

A laborious calculation was made for each zone in the provinces of Campania, Basilicata, and Apulia. This was based on the 1929 Catasto with detailed data of the actual amount (in quintals) of every item produced in each commune and each zone. Using the 1950 prices at the farm we calculated the total value of gross agricultural production per hectare, per holding, per worker and per family in each Agrarian Zone. These maps give a clear indication of the degree and distribution of production per unit of area and per family. A yardstick was required to determine the degree of "pressure." This is provided by the fact that the land settlement authorities, on the basis of numerous family budgets, reckon that gross farm income of 500,000 lire or a net income of 300,000 lire for food, clothing and services for a family of five (100,000 lire per consumer unit) is needed to meet the essential minimum living conditions acceptable on Italian standards. The remaining 200,00 Lire covers farming expenses, farm mortgages, etc.

Degree of Employment

Not only income per capita and per family, but the amount of employment available per active potential worker is basic to the determination of the degree of "overpopulation." The official figures of unemployment take no account of the vast numbers of peasants who have a bit of land but depend on casual labor to supplement their income. The fact of the matter is that there are numerous small holdings that do not offer sufficient work to the peasant or to the work potential of his family (which is a much more realistic measure of the labor force than the individual heads of the family). The labor force may be determined from the number of those supposedly engaged in agriculture as given by the (1936) Census. Women may be converted to men units (0.6 of a man unit) and the total man units so determined. The work actually

available may be determined from assessing the land-use, allowing so many men-days per hectare of each type of land use (sown land, vines, olives, etc.). This method of calculation is used officially in Italy for the imposition of laborers on farm operators in the South as a means of immediately meeting its agricultural unemployment problem. This is done on a month to month basis and the number of labor-days an operator must give is officially determined in each commune from the land use on his holding. These figures are then available officially for each Province in which this law applies. They have been the subject of investigation by agricultural economists for many years. Such data have been evaluated and utilised in order to indicate for each Agrarian Zone: (1) the total man-units available in the Zone, (2) the total number of man units that the aggregate land use demands, and thus (3) the surplus (or deficit) labor, expressed in terms of man-units. This again involved time-consuming calculations. The data were finally mapped and listed. In this way it was possible to map the regional distribution of the excess of labor. It was also possible to determine for the whole of the southern continental Italy the amount of its surplus agricultural labor under the existing conditions of agriculture. These calculations, it must be emphasised take no account whatever of other sources of occupation, i.e. forestry, fishing, public works, etc. The yardstick that is used here is that 250 days of work per year per man is considered officially to represent full employment. It deducts, in other words, from 365 days, the holidays throughout the year, as well as days in which work is not possible because of bad weather, etc. The degree of underemployment in terms of man units to total available man units was expressed as a percentage and also mapped by Agrarian Zones.

The important fact that emerges here is that throughout most of the Abruzzi and Campania and the western coastlands of Calabria and the province of Potenza (the interior highlands) there are less than 150 days of work available for each worker, and in the most densely populated (i.e. with most workers per sq. kms.) there are actually only 50 to 100 days of work per year. This latter condition is especially characteristic of the whole of Campania. Throughout the rest of the South notably in Apulia the figures are higher, but there is acute competition among large numbers of laborers than in the West and center. Workers are mainly small cultivators and laborers few. It is precisely in the latter areas that we find the greatest percentage of underemployment. Yet these are the areas of most intensive agriculture, in which substantial agricultural changes are unlikely. Elsewhere, especially in the areas of more extensive agriculture on large holdings, where there are large numbers of landless agricultural laborers, there is a large margin of possibility for increasing the intensity of production and thereby, through changed conditions of tenure and agricultural practice, of increasing the labor days and of production per capita. These are the areas of greatest social unrest. But the demographic problem is most serious in those areas where production is at its highest per capita. Agrarian reform is of no avail in these areas. They must depend on industrial development and emigration for a release of population pressures and an increase of family income.

Proportion of Agricultural Labor Unemployed

The above map series gives us data as to the physical conditions of agricultural production in Southern continental Italy, the land uses, the density of agricultural population, the sizes of holdings and properties, and the value of agricultural production per hectare and per man. We also have relevant yardsticks of the total agricultural production per holding and the total income per family that is needed to meet the essential minima in Italy. This is put at a minimum of 100,000 lire per year per consumer unit at 300,000 lire per family to cover the necessities of life. In the case of any kind of farming family this requires a gross agricultural production of almost 500,000 lire. On this basis we have estimated the degree and distribution of the proportion of the agricultural population who are

"underemployed" and have an income inadequate to support them on Italian standards. These are real measures of what we mean, under a given set of conditions, of "over-population" or "population pressure."

The Family Budget

The level of living of the population of any area must begin with the study of its component families. The method of investigation of the family budget of agricultural families is an old established procedure in Italy and there are many studies of families in particular areas and in particular occupational categories. Moreover, this is the procedure that is now being used as a practical basis for the settlement of families on new holdings in the areas of land reform. Much of our time has been spent in the study of representative family budgets in the various regions of the South. We have also collected data and prepared graphs of the seasonal and monthly distribution of labor on such holdings. In other words, our investigation has been based not only on the averages for the Agrarian Zones, but also on specific case studies in different agricultural areas.

These family budgets include the following data that wherever possible have been mapped or graphed: size of holding, work and consumer units in the family, capital input per hectare (buildings, equipment, livestock, fertilisers, advances), land use, and rotation, equipment, labor distribution for different crops per month and in aggregate for the year, gross saleable production, expenses, value of products sold, net income, for the holding per work unit and per consumer unit.

These data were obtained from (1) monographs prepared over the last 20 years by agricultural economists under the auspices of the Istituto Nazionale di Economia Agraria; (2) unpublished studies made accessible by various workers; (3) the budgets prepared for the Doxa Institute of Milan for sample small cultivators. The last were provided by Professor Manlio Rossi Doria of Naples. Finally, such data are published annually for a series of type farms in all Italy by the Istituto in their annual volume.

Work Rhythms

The amount of labor available to the individual worker and to his family is subject to marked seasonal rhythms. This depends on the nature of the crops and the kind of husbandry. We have given attention to the monthly variations in the work required throughout the year by different kinds of crops. We have examined in these terms also the labor opportunities that are offered by seasonal employment with which are associated the seasonal migration of workers that has in the past been a very marked feature of Italian life. The principal movements of this kind are for the wheat harvest, for the vine and olive and citrus fruit harvests. These seasonal migrations have been greatly reduced in recent years by government decree and by the imposition of surplus labor on the holdings within the commune (imponibile di mano d'opera).

In brief, the most marked irregularity of work is associated with the one-crop cultivation of wheat, whether it be on the big estates or on the minute peasant holdings of the interior of Potenza and the Abruzzi and Calabria. One third of the labor-days required for the production of a hectare of wheat are concentrated in the three months of June, July, and August. The production of vines (c. 100^{days} per hectare) olives (c. 50^{days} per hectare), and fruits, though on the whole requiring a bigger labor input per unit area, is also markedly seasonal in labor demands. The continuous production of vegetables and fruits with irrigation, such as obtains in Campania, result in the most continuous curves of employment. This marked seasonality of agricultural work rhythms is one of the sources of underemployment, as well as the inadequacy of the small holding to employ the family labor. The introduction of a greater variety of crops and modified rotations, abolishing fallow, and the increase of livestock that require constant daily care, will add greatly to the labor input, as well as to the cash output, per hectare. This is one of the objectives of the agrarian reform program.

Summary and Conclusions

The Demographic Situation

The essence of the population problem of southern Italy, that has been investigated in its various aspects, is in brief, threefold:

1. the problem of coping with large numbers of cultivators and laborers and their families who have not enough work to maintain a level of living that is acceptable even on Italian standards; that is equivalent to about 30% of the total agricultural labor force (500,000);
2. the problem of the net increase of population that annually brings in a large number of additional workers to the labor force (50-60,000); and
3. the large core of officially unemployed (about 150,000 in agriculture).

For one hundred years there has been no essential change in agricultural techniques or production, but, in spite of a large emigration down to the twenties, the numbers of people dependent on agriculture remained unchanged and the number of dependents on the active workers greatly increased. Over the last fifty years there has been a remarkable reduction in the birth rate in Italy, that has been most marked in the northern and central provinces, and least, though substantial, in the south. The crude birth rate in the southern provinces still lies between 23 and 28 per 1,000. There has also been an equally remarkable reduction in the death and rates during the last fifty years. The natural increase is still high; another aspect of the problem in the south is to absorb this annual addition to its labor force.

Moreover, the improvement of conditions in the south involves vast capital investments, that are generations overdue, on the improvement of the physical environmental conditions - namely, the provision of public water supplies, sewage systems, roads (especially local roads to the numerous remotely located villages), housing, redistribution of land among the peasants, so as to form more rational farming operating units, and the reform of conditions of land tenure and contracts. Marketing conditions of saleable products, especially vegetables and fruits, require attention and financing. All this demands vast investments of capital which will not bear dividends for years. It demands public assistance and foreign aid. The present

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program of redevelopment on these lines that will cover the next ten years has been launched almost entirely with the aid of American funds. It remains to be seen how the rest of it during the following years will be completed.

The possibilities for the solution of the depressed economic and social conditions of southern Italy may be summarized as follows (each aspect has been the subject of investigation in the project)

In the first place State intervention is absolutely essential to the solution of the problem. This is now evidenced by the great program being carried out by the new State authority known as the Cassa per il Mezzogiorno. Large scale, well planned and continuous State intervention is necessary in order to shift economic balance towards the South. This must be an all round program of resource development - that is, of natural resources, physical environmental conditions, Stimulus and human materials (education, social service, etc.) and of must also be given to emigration. It must be definitively recognised that "no serious consideration can be given to a demographic policy that aims at reduced births. Apart from everything else, experience has shown that in Italy there is no hope of political intervention being successful in the matter" (Molinari).

Thus there are four possible lines of attack to the problem of general resource development aiming at the solution of what is essentially a demographic problem.

(1) Emigration. This depends on the policies of States prepared to take immigrants. Moreover the bulk of the potential emigrations from the South would be unskilled and destitute. A potential emigration of 50,000 per annum over a ten year period (net of repatriations) is the maximum that can be expected. This figure would only give a small help to the current problem and would in itself be of no lasting significance since it would not appreciably affect the present internal conditions. Emigration of itself will not change the existing demographic, economic and social conditions that lie at the root of the problem.

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Nearly four million people, or 40% of the natural increase, emigrated from all Southern Italy between 1861 and 1936. Yet the productive population (over 10 years of age) remained unchanged, while the unproductive population (under 10 years of age) rose by 2.3 millions. Emigration had no substantial effect on the economic and social situation at home. Agriculture remained unchanged.

(2) Agricultural Development. Agriculture, the direct livelihood of more than half the total population, has remained unchanged since 1861, while the numbers of dependents upon it have increased. There is widespread "hidden unemployment" as well as chronic "official" unemployment. Thus, an increasing number of people of working age depend, for long periods of time, on their families. There has been a continuing decrease of the net income per capita among those dependent on agriculture. Our figures indicate that in southern continental Italy over one-third of the labor of those recorded as dependent on agriculture is unemployed - owing to the tininess of the holdings and the inadequacy and seasonal irregularity of the work they can get from others. (An investigation by Moore for the League of Nations gives the figure of this "overpopulation" as 41% of the total population of all southern Italy).

There are possibilities of agricultural development in the South, although physical conditions are in general extremely unfavorable. Most of the land is hilly or mountainous, rainfall is insufficient over wide areas in summer, river regimes are very irregular, torrential in winter and dry in summer, so that there is widespread soil erosion and irrigation possibilities are very limited. Methods of agricultural production are thus obviously limited. The traditional economies are based on wheat, vines and olives and other fruit trees. Livestock play an insignificant role and are foreign to the concepts of traditional peasant agriculture. The main form of livestock farming has been carried on in the past by means of transhumance, whereby the coastal plains have been used for winter pastures and the stock taken up to the hills in summer. There is great scope for the intensification

and improvement of peasant farming techniques and breaking down old traditions. But guidance, education and persuasion by constant direct contact are essential. There is scope for intensification of the peasant agriculture, by the introduction of more bush and tree crops (vines and olives in particular) and by the introduction of more grass crops in the winter season and drought resistant summer grasses, so as to increase fodder yields throughout the year and thus increase among the peasantry their livestock carrying capacity, and so their production of milk and meat. The extension of irrigation in certain plains areas will permit the increase of such production as well as of other fruits and vegetables. But such possibilities in the light of the total problem are not greatly significant. Lastly, mechanisation aggravates the surplus of man-power. It results in the short-run increased (technological) unemployment. In the long run this may be mitigated by increase in production per capita, but at present it is a primary problem.

These improvements in peasant agricultural techniques and in marketing of the saleable products and in the extension of the cultivated areas and in the increased intensification of production will go far to relieve the poverty of the peasantry. But even the boldest programs for agricultural development in Southern Italy do not anticipate the absorption of more than 5 - 10,000 units yearly. The main aim and purpose of agricultural improvements will be to increase the level of living of the peasantry, not to absorb greater numbers dependent on it. Indeed, future trends must inevitably result in a decrease in the numbers dependent on agriculture.

Farming is extremely simple and traditional in its techniques, the mattock and the wooden plough drawn by an ox or mule, are the commonest methods of cultivation. Fertilisers, either chemical or animal dung, are very little used. Only on the large commercial holdings are these modern methods used. The introduction of machinery has already reduced labor demand and caused a good deal of underemployment among

laborers and peasants who used to find work during the wheat harvest season. The introduction of machinery in such a densely populated agricultural area raises special problems. It must be accompanied by the intensification of farming so as to absorb the released labor supply. On the other hand, when agriculture is intensified - as will happen in the next few years in the land reform areas of Apulia, Lucania, and Calabria - the use of tractors for ploughing and threshers will become essential. Since peasant holdings are being established in such areas, this will necessitate a big expansion in the cooperative ownership and operation of machinery. The absorption of labor through industrialisation is a much longer and slower process. The first stage is to improve the well-being of the peasantry. In this way the market in the South will increase for both producers and consumers goods.

(3) Public Works. A vast program of public works of all kinds is needed to effect the improvement in physical environmental conditions - housing, water supply, sewage disposal, road and rail construction, afforestation, drainage, irrigation, etc. This is basic to all permanent progress in an area that has done practically nothing to change itself in modern times. Such a program will give the initial impulse to recovery. "A long term plan of public works must be drawn up and executed as the first stage in the process of clearing up; its foremost task being to set capital and enterprise in motion so as to create the surroundings and the background required for the development of agricultural activities and for industrialization" (Molinari). This would also act as a "psychological encouragement" to new enterprise as well as to the local populations." This very program of public works is the main purpose of the twelve year program of the Cassa per il Mezzogiorno and the Fondo per l' Industrializzazione del Mezzogiorno. The two billion dollars of the Cassa is being devoted almost exclusively to public works and agricultural improvements. Such works are already absorbing enormous numbers of man-days. This absorption will continue during the period of the present program (until 1962).

(4) Industry. About one-fifth of the employed are engaged in "industry."

Industrial possibilities fall into three categories - first, new industries established to serve the nation-wide market; second, industries based on regional resources - the processing of agricultural products, such as olive oil, and wine production, and the preserving and canning of fruits and vegetables; and third, the handicrafts, such as wood working and spinning and weaving. The second group is obviously the most important and must be based therefore essentially on improved conditions and methods of agricultural production. Handicrafts must be reorganised and modernized.

It has been established by studies of production costs that the majority of industries in Southern Italy have no cause to remain in a position of permanent inferiority with regard to the other regions of Italy. The higher costs of industry in the South, where they occur, are due in the main to environmental conditions. Financial assistance will be needed from the outset to put them on the same footing as those in the North regarding the higher costs of production caused by the less favorable environmental conditions.

The basic problem in the South is the shortage of capital. This may be relieved by (1) foreign loans, (2) directing local capital to industry in the South, and (3) investment in the South of its local savings. The banking system in the South is more attracted by "non-risk investments" (i.e. State securities, post office bonds and post office deposits) that have no connection with activities in the South. The southern banks make less attempt to collect savings than in the North. In southern continental Italy, for example, only 28% of the communes are served by a local bank as compared with 68% in Central and 45% in Northern Italy. Post Office ~~savings~~ ^{are} ~~savings~~ in the South ^{are} more prevalent than bank ~~savings~~ accounts. It is difficult to assess the capital loans effected by the government (largely with E.R.P. aid). The principal organization is the Fondo per l'Industrializzazione del Mezzogiorno, established by law in 1947. Up to the end of 1951 some 60 billion lire had been

provided through the Banco di Napoli for the support of industry in the southern provinces.

Regional Reconstruction

In 1950 a vast program of about two billion dollars (1,280 billion lire) for the rehabilitation of the whole of Southern Italy and the islands of Sicily and Sardinia was launched. It was planned to cover a ten year period, though this has now been extended to twelve years. It ^{is} being devoted to public works, agricultural improvement and land reform. It is a coordinated effort to cope with the appalling conditions of poverty that we have analysed in the foregoing investigation. A thorough evaluation of the nature, progress and prospects of this work has been essential. At the same time it must be remembered that this program is only in its third year and it is far too early to draw valid conclusions except to comment on the vigor and thoroughness with which the work is being undertaken. Big steps have been made in land reform in selected "depressed areas," where there are large underdeveloped latifundia with large numbers of landless, underemployed, restless, laborers. Expropriated properties are being subdivided among landless families in accordance with scientific principles as to size and economy of the holdings. But such reforms are applicable to only a small section of all the South. So excessive is the subdivision of land over the great areas of peasant family farming that, even with drastic reforms of land tenures and labor contracts (that are equally urgent), it will not be possible to absorb the labor of the whole population in agriculture with adequate income per family. Great progress is being made with afforestation in the interior river basins, in the provision of roads, aqueducts, sewage systems, hydroelectric and irrigation developments. Aid is also being given to improvement schemes of private owners. It is naturally public works that so far have absorbed the bulk of the obviously unemployed labor.

Land Reform

Land reform laws became effective during 1950 in selected depressed areas in Italy. Most of these areas are in the South and the program is most advanced in the areas of northern Calabria and Apulia-Lucania.

The purposes of the reform are as follows -(1) to expropriate large underdeveloped properties; (2) to distribute such expropriated land primarily among landless agricultural laborers and agricultural families without adequate land to support them; (3) to provide capital equipment and technical assistance to such families; (4) to ensure that the holdings provided have a size and economy adequate to a) maintain full employment for the family labor available, and b) to provide a level of living adequate on Italian standards (fixed at a net family income of 300,000 lire for an average family of five); (5) to intensify production by a) grain-grass rotations and the keeping of one or two cows and calves; and b) vine-olives and, where physical conditions are appropriate, crops such as beets, cotton, tobacco, citrous, and vegetables, as cash crops.

The law as it stands will affect 700,000 hectares in all Italy of which a half is in southern continental Italy. The main irrigation projects under construction are also within selected areas. The district associations of proprietors within the areas are legally obligated to effect land improvements, for which they receive substantial State aid (one-third of costs).

This land reform program will put just over 100,000 families on new holdings in all Italy and 40,000 families in southern continental Italy. It will also involve others in services as in the new "village" settlements or borghi. This is only part of the total ten year program of resource development. It will go far in solving the problem of the pressure of population - that is low-level of employment and of income - in Southern Italy.

Ten Year Program Progress and Prospects

We may first examine the investment needed in the whole of the Mezzogiorno in order effectively to cope with the common problem of poverty and unemployment in the next ten years. It is considered by Italian economists that an investment of 2 million lire is required to give permanent work to a¹ man-unit. Thus, for the whole of the Mezzogiorno, to find work for the annual estimated increase of nearly 100,000 adults (males 15-65 years and females 15-19 years) would require an investment of 200 billion lire per year; to absorb the 600,000 unemployed would require an additional 120 billion lire per year; while the equivalent of 600,000 man-units of agricultural unemployment on the mainland (probably close to one million for the whole Mezzogiorno) would require about 150 billion per year over the same period. The grand total of investment needed to eliminate unemployment and poverty would thus be about 450 / 500 billion lire per year for ten years. This figure is crude, but at any rate it gives a basic measure of the need. In order to attain an acceptable minimum living standard for the people of the South. We must also recall that the natural resources of the South are mainly agricultural and even these are severely restricted by terrain and climatic conditions. Environmental conditions and integrated land development require first attention, but the extension of industry, coupled with freedom of emigration are the only effective long term solution of the problem. We shall elaborate these points further.

1. Popolazione e Forze di Lavoro, Svimez, Rome, 1952, p. 67.

Economic trends and their prospects are given constant attention by Italian specialists and the press. A recent authoritative pronouncement has been made by Prof. Pasquale Saraceno, one of the foremost Italian economists,² on this question. He assumes that the agricultural production will increase by 1.5% per year from 850 billion lire in 1952 to 1,000 billion lire in 1963. An increase of 5% per annum (3.7% as an alternative lower estimate) in industry and other activities is assumed for the same period. This would bring the total gross production from 2,000 billion in 1952 to 3,000 billion lire in 1963 - an increase of 50/34% on the higher and lower estimates. Population will increase from 17.6 to 20.1 millions in the same period. Thus, the per capita production would increase from about 116,000 lire to 150,000/137,000 lire. The investment in 1952 was 425/450 billion lire - which fits closely with our crude estimate above. But in order to reach the above goals investment will have to be increased to 750/800 billion in 1963. In other words, investment must be steadily increased year by year to nearly double the present figures in order to attain a growth of production that is, in fact, very conservative in comparison with the experience of other western countries. The trouble is, of course, that areas like Southern Italy, have a terrific leeway to make up in providing essential environmental requirements in a very few years with a paucity of capital available within the area. In 1952 out of the 425 billion lire of investments, 58% were public and only 12% of all private investments in Italy reached the South. Only 42% of the total investments were private investments, as compared with 76% in the Northern half of

2. At a Naples Convention in November, 1953, and summarised in Informazioni Svimes, 11 Nov. and 18 Nov., 1953, with statistical tables.

the country. Moreover, at present, less than 10% of the public investments are going to industry. Clearly, therefore, there must be a substantial increase in overall investment and this must come primarily from private sources by diversion from northern Italy. Further, such investments must be directed primarily to industry and other non-agricultural activities. Saraceno calculates that out of a prospective increase of 345/500 billion lire in industry, only about one-sixth can possibly be achieved by the increase of those industries that process agricultural products (derived from the estimated increase in production of the products plus the value added by processing). The attainment, therefore, of what are fairly modest goals, must come from other fields, and must be assessed in terms not merely of the increasing consumer market of the South, but of the whole of the population of Italy, as well as of foreign markets. Saraceno also foresees that in the period 1952-63 the number engaged in agriculture will remain essentially unchanged at 3.1 millions, so that per capital income will increase from 274,000 lire to 322,000 lire (18%), and that industry and other activities (commerce, transportation, service) will absorb an additional million workers, so as to reach a total of 3.7 millions in 1963, with an increase per capita income from 440,000 to 550,000 lire (25%).

On this background, we may now examine the current trends. In 1950 the Cassa per il Mezzogiorno was established as an extra-departmental organization to administer the funds of a ten year program for the development of the South. These funds amounted to 1,000 billion lire, but were supplemented in 1952 by a further allocation of 280 billion lire and the extension of the period to twelve years. The funds are to be devoted almost exclusively to the improvement of the living conditions of the peasantry. Some 415 billions

are earmarked for irrigation, land reclamation and land improvement; 225 billions for mountain systematisation; 280 billions for agrarian reforms; 145 billions for aqueducts; 115 billions for roads; 70 billions for railroads; and 30 billions for the tourists industry. In December 1952, after 18 months of effective operation, projects to the amount of 208 billion lire had been approved - 35% for reclamation, 25% for roads, 15% for mountain systematisation; 15% for aqueducts and 7.5% for agrarian improvement for agricultural purposes. Though the provision of roads and water supply have taken off with a flying start, over three-quarters of the total funds are to be expended in land improvements of all kinds.

It is claimed that the agricultural program of the Cassa alone will give permanent employment to the equivalent of 360,000 man-units. Some 200,000 man-units have found work through the activities of the Cassa since December, 1950, and it would appear that a large part of the underemployment in the areas in which it is operating has been absorbed (e.g. Tavoliere).

The scope of the program includes hydraulic and forestry regulations on 1.7 m hectares, partial regulation and improvements on 2.6 m hectares, the agrarian transformation by dry farming techniques of 550,000 hectares, and the improvement of general conditions preliminary to transformation on 2.0 m hectares. There are also to be constructed 150 villages, 2,800 farm centers, 50,000 farm houses, 3,200 miles of reclamation roads and 20,000 wells. The production and labor absorption on 3.5 m hectares will be increased three-fold according to preliminary estimates.

Primary emphasis is being given to the irrigation of 360,000 hectares, of which 300,000 are on the mainland. The schemes under way include those on

3. Cassa per il Mezzogiorno: Purposes and Programs, 1953, 30 pp.
4. Lo Sviluppo dell' Economia Italiana, Rome, 1952, p. 200.

the rivers Ofanto, Pescara, Volturno, and Garigliano. The big Fortore river scheme, that will irrigate 40,000 hectares in the Tavoliere, has not yet been started. The program of reclamation and irrigation is being confined to the compressori di bonifica that were organized as local associations of land owners in accordance with the law of integral land reclamation of 1933. Afforestation is being carried out in the highlands back of the reclamation districts. Land reform is confined to clearly defined areas established in accordance with the laws of 1950-51. Certain works such as the construction of roads and aqueducts are to be carried out over much more extensive areas and big strides have already been made. It is estimated that the land reform program will resettle about 40,000 needy families, or about 200,000 people, in the southern mainland.

We turn now to the prospect of the program (the details must be sought elsewhere). The reclamation districts and the land reform districts in which the great bulk of the work is to be concentrated, overlap and broadly correspond with the latifundien zones described as extensive commercial (hired-labor) and extensive peasant (family-labor). Here are the great underdeveloped properties and nearly a half of all the laborers in the South. Here prevails the greatest social unrest. Laborers act through their unions and political organizations. Peasants have often taken the law in their own hands and forcibly occupied lands in their communes. Here are the expropriated lands which are being distributed among the neediest of the landless laborers and non-autonomous peasants. Here agricultural production is to be increased several fold more diversified economies and here are concentrated all of the irrigation of

nearly 300,000 hectares. The present economic program in these areas has quite obvious political as well as economic motives. Laborers, who normally have worked for only 100 - 120 days, as in the Tavoliere, are now working full time (200-250 days per man-unit), and underemployment among them has virtually disappeared. The cultivators here, however, fare much worse, with little State work and almost no non-agricultural work.⁵

The Cassa program, however, does not extend to and cannot directly affect the peasantry in the rest of the South, wherein are found the zones of most primitive extensive peasant cultivation in the interior and of most intensive cultivation on the coastlands in Campania, Calabria and Apulia. Here are to be found over one-half of the agricultural workers, of whom about two-thirds are peasant-family cultivators. In the interior, there are smaller proportions of laborers, many of whom cultivate a bit of land and depend on casual jobs without any marked seasonal rhythm, for their extra earnings. They are not and cannot be as effectively unionised as the masses in Apulia. The lot of these laborers is more precarious than those in Apulia, and it is obviously much more difficult to absorb such labor by means of public works. In the zones of extensive peasant-family economies there are masses of peasants living near or below the poverty lines. Over wide areas in Basilicata, Calabria and the interior of Campania they are mainly self-subsistent cultivators and produce little for sale. Underemployment is greater and far more difficult to eliminate among the non-autonomous peasant cultivators than among the landless laborers.⁶ The latter have benefitted most by recent public works.

5. Commissione Parlamentare di Indagine sulla Disoccupazione, La Disoccupazione in Italia, Vol. 11, Tomo 3, p. 17, footnote.

6. Op. cit., p. 28.

Poverty and insecurity also prevail in many of the areas of intensive cultivation in Apulia and the coastlands of Calabria, and in the plains and hills of Campania, where the most intensive economies prevail. These latter are the densely peopled areas of the South where there have been big advances in the last hundred years of labor-input and cash-output. These cultivators depend primarily on the sale of their crops for income (75% to 100% of gross production) and the production of wheat, the staff of life, is often only a fraction of consumption needs and must be bought for cash. These people are at the mercy of the local merchant and he in turn is controlled by concerns from the North. The peasant must sell his wines, olives, almonds and other products in the fall immediately for ready cash, when prices are lowest. His livelihood depends on the market as much as on his skill as a cultivator.

The current land reform law can do nothing to solve the problems of economic and social distress in these great areas of peasant cultivation in the South, in both the interior highlands and the coastlands, since they do not have expropriable properties. Emigration, industry, and the intensification of agriculture - which means capital in a small, but vital way, and instruction - are the needs. Such measures are particularly necessary throughout the interior of the primitive Mezzogiorno nudo as well as in the vine-olive lands of Apulia. The growth of forage grasses in winter on lands that are often left idle and the introduction of new grasses resistant to the summer drought (that are well known and proven) should permit a substantial increase in the livestock population. As for the producers of wines, olives, fruits, and vegetables, a more effective marketing organization and better local processing and preserving industries are needed so as to release the peasant from the vagaries of prices

when he sells and so as to free processing industry from the stranglehold of Northern interests. Finally, throughout the South there is need for the simplification of land tenures and agricultural contracts in favor of the small cultivator, be he owner or tenant or share tenant. Mechanisation must go slow, since unless accompanied by intensification of peasant economies, experience proves that inevitably increases unemployment.⁷

It is beyond the scope of the present trend of investment to absorb all unemployed and all underemployment as well as with the needs of environmental improvement. There is need for larger fields of jobs with greater productive capacity per capita than agriculture. There must be emigration abroad and to other parts of Italy. There must be freer seasonal movements of workers within the South to places where farm work is available. Such movements have long been a natural means of finding work through the year when and where available. They have been virtually eliminated by restrictive legislation and this has contributed substantially to local underemployment. It is essential that such regional movements be resumed. Industry and services are further essential needs - for the sale of goods to home consumers (among the southern peasantry as well as throughout Italy) and for export to foreign markets. It is assumed that as the basic improvements are effected the volume of industry and service will increase by private investment and that there will be a transference to these activities of many of the surplus workers in agriculture.³ Further, the list of unemployed and the problems that prospective

7. Mechanisation on cereal holdings in Apulia causes reductions of over one-half in wages and labor per man. Op. cit., pp. 40-41.

8. About 150 million lire have been invested in industry by the State since 1945 in the South as a whole. Large sums are being used in the construction of hydro-electric plants that will bring production to 3 million kw hours in 1953 (800,000 in 1942). New plants have been established in the Naples area and food processing concerns in particular have been financed in the different provinces. In April 1952-53 the Cassa contributed 9 billion lire to industrial enterprises with a total investment of 17 billion lire - with one-third in Campania.

employers have in getting the right kind of labor - even craftsmen in the villages, to say nothing of skilled technicians in industry - reflect the illiteracy and ignorance and lack of skill of the peasant. Lack of capital and lack of educational training are major bottlenecks in the matter of job finding outside agriculture and need immediate attention.

Finally, it needs to be emphasized that the problem of poverty in southern Italy is not by any means solely a question of economics. It is also a psychological problem. Time and time again one meets in the villages the contention from the peasants that simple improvements cannot be effected without money. Many a local problem of water supply, sanitation or sewage disposal or marketing could be worked out with the aid of strong arms and cooperation. This has been demonstrated admirably in Greece. Much wastage can be saved and hygiene improved through the most influential member of the family circle, the woman. The Near East Foundation has demonstrated this in its village work in Macedonia and the Near East. The potentially important role of the young woman, trained in the rudiments of home economics and hygiene, is only just being realized in the South. The attitude of the peasant is born of a feudal servility that is pathetic to behold. He is also often illiterate with very little knowledge outside the day to day life of routine and penury to which he cannot see any outlet. The attitude of hopelessness is one that must be cured. The peasant, promised so much over many years by one government after another, is a cynic and an individualist. He is, however, far more ready to learn than the townsman or official often believes. He is ready to learn if the teacher really believes in his craft and has sympathy for his pupil. Traditional attitudes - in husbandry and diet - must be broken down. Milk may be good food but one has to acquire the

habit of drinking it and caring for the cow. Education for young and old is the only means of effecting these essential changes. Constant help and guidance are needed from trained young experts, native to their villages. As throughout southern Europe, there is a general lack of respect by the townsman, the official and the clerk, for the peasant. Fortunately the wonderful work of many young men in remote areas in connection with the land reform program belies this judgment, but this is exceptional. The attitude is there and must somehow be changed though it will take time. Then there is the attitude of prestige and wealth that are associated with the ownership of land as a source of unearned income. There are remarkable instances of enterprising owners who have developed their land on a mezzadria basis with carefully picked peasant families - and introduce improved economies with milk cattle - a system that is well suited to the poverty and lack of knowledge of the peasant. But generally the thousands of owners do nothing for their tenants, and the local borghesia is a far more difficult problem to handle than the large property owner. Lastly, there can be little hope for permanent economic and psychological improvement for the peasantry until the land tenures in all their incredibly complicated manifestations are simplified and the peasant, be he renter or sharer, be guaranteed some kind of legal security.

So we pass from the specific to the general, for these are basic problems of all so-called "Underdeveloped-areas" where poverty and lack of capital prevail. The influx of capital must be balanced throughout by enterprise and action within the peasant community - in the class room, in the field, and, above all, in the home. One of the major challenges in supporting such peoples at adequate planes of living is how to achieve the simple objectives, that cost so little but could reap such rich dividends.

Plans for Publication

Four articles are ready or in the making for publication.

Land reform in Southern Italy. This report was first submitted to the annual meeting of the Association of American Geographers at Cleveland, March, 1953. It is to be published in a forthcoming issue of the periodical Economic Geography.

The Population Problem of Southern Italy. (Two Parts) The results of the research together with a selection of its maps are being prepared for publication as one or two articles. These will be submitted before the end of the year or later (depending on the arrival and working of the new data)

Rural Settlement in Southern Italy. An article based on the maps series prepared for the whole of the South on a scale of 1:100,000. These have already been photographically reduced. It remains to present the final results of this investigation in article form.

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